

REMARKS

Claims 1-22 were pending at the time of examination. Claims 1, 9, and 13-15 have been amended to further define the patentable subject matter of the present application. No new matter has been entered. As a result, reconsideration of claims 1-22 is respectfully requested.

Examiner Interview Summary

Applicants' representatives David Fogg (Reg. No. 35,138) and David Freitag (Reg. No. 56,675) thank Examiner Osborne for the opportunity to discuss aspects of this case in a telephonic interview on October 10, 2007.

The pending claims were discussed with respect to the Examiner' rejection of claims 1, 2, 4, 5, 8, 9-16, 18, 19 and 22 under 35 U.S.C. § 103(a) as being unpatentable over the "Cable Calculator User's Manual" of ADC DSL Systems, Inc. ("ADC") in view of U.S. Patent No. 6,091,713 to Lechleider et al. ("Lechleider"). During the interview, the 'synthesized' subscriber loop structure disclosed by *Lechleider* was discussed as a model used to represent the system and whether that model is built with measured empirical data to calculate and determine cable losses in a cable plant as disclosed in the present application. The Examiner indicated that additional amendments to the claims would be considered based on further review of the *Lechleider* reference in light of the above-stated discussion.

Applicants believe that the substance and scope of the interview of October 10, 2007 is accurately captured in the summary above and in the following remarks.

Drawings

As indicated on page 2 of the Office Action, Applicants thank the Examiner for accepting the drawings filed on April 16, 2007.

Specification

As indicated on page 2 of the Office Action, Applicants thank the Examiner for withdrawing the objections to the specification.

Claim Objections

As indicated on page 3 of the Office Action, Applicants thank the Examiner for withdrawing the objections to claims 4, 6, 8, 18, 20, and 22.

Claim Rejections - 35 U.S.C. § 112

As indicated on page 3 of the Office Action, Applicants thank the Examiner for withdrawing the objections to claims 1-22 under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 103

Claims 1, 2, 4, 5, 8, 9-16, 18, 19 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the “Cable Calculator User’s Manual” of ADC DSL Systems, Inc. (“ADC”) in view of U.S. Patent No. 6,091,713 to Lechleider et al. (“Lechleider”). Applicants respectfully traverse this rejection.

Claims 1, 2, 4-5, and 8

Claim 1 (as amended) is as follows (**emphasis added**):

1. A method for modeling cable loss for a cable plant, the method comprising:

identifying a service to be provided over the cable plant;

selectively entering at least one value corresponding to at least one parameter of the cable plant;

on entering each of the at least one value, **determining whether an estimated cable loss for the cable plant is capable of providing the service based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant;** and

displaying the estimated cable loss for the identified service.

Applicants respectfully assert that *Lechleider*, in view of *ADC*, either alone or in combination, fails to teach or suggest the method of claim 1. In *Lechleider*, there is no discussion of “determining whether an estimated cable loss for the cable plant is capable of providing the service based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant” as called for in claim 1. Applicants agree with the Examiner on page 6 of the Office Action that *ADC* does not “expressly teach the empirical model including data on losses affected by bridge tap placement and bridge tap length in the cable plant” as called for in claim 1.

The Examiner indicates on page 9 of the Office Action that “*Lechleider* in fact does teach an empirical model [*Lechleider*: Another object of the present invention is to provide a method and system for synthesizing a subscriber loop structure that approximates a set of measured loop characteristics (Column 3, lines 27- 30)]. The ‘synthesized’ subscriber loop structure is a model used to represent the system and that model is built with measured empirical data.” Applicants respectfully traverse this argument.

In contrast, *Lechleider* appears to, at most, determine the location and length of bridge taps based on information collected by modems 103 and 113 (*Lechleider*, Col. 8, lines 41 to Col. 9, line 60), and does not teach or suggest using an empirical model with this information to determine “whether an estimated cable loss for the cable plant is capable of providing the service based on all the entered at least one value.” As a result, Applicants respectfully assert that none of the references, alone or in combination, teach or suggest the method of claim 1. Accordingly, withdrawal of the rejection of claim 1 is respectfully requested.

Claims 2, 4, 5, and 8 depend from claim 1 and, as such, are allowable for at least the reasons provided above with respect to claim 1. Withdrawal of the rejection of these claims is respectfully requested.

Claims 9-12

With respect to claim 9, none of the references, either alone or in combination, teach or suggest a method for “calculating component loss values for each of the cable spans and the bridge taps based on at least the entered first and second set of values and an empirical model of cable loss, the empirical model including data on potential losses affected by bridge tap placement and bridge tap length in the cable plant” and “combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss and determine if the identified service can be provided” as called for in claim 9. Accordingly, withdrawal of the rejection of claim 9 is respectfully requested.

Claims 10-12 depend from claim 9 and, as such, are allowable for at least the reasons provided above with respect to claim 9. Withdrawal of the rejection of these claims is respectfully requested.

Claim 13

With respect to claim 13, none of the references, either alone or in combination, teach or suggest a tool with “means, communicatively coupled to the means for identifying and the means for selectively entering, for determining an estimated cable loss for the cable plant providing the service on entry of the values based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on potential losses affected by bridge tap placement and bridge tap length in the cable plant” and “means, communicatively coupled to the means for determining, for displaying the estimated cable loss for the identified service to determine if the identified service can be provided over the cable plant as called for in claim 13.

Accordingly, withdrawal of the rejection of claim 13 is respectfully requested.

Claim 14

With respect to claim 14, none of the references, either alone or in combination, teach or suggest a tool with “means, communicatively coupled to the means for identifying and the means for selectively entering the first set of values and the means for selectively entering the second set of values, for calculating component loss values for each of the cable spans and the bridge taps based on at least the entered first and second set of values and an empirical model of cable loss, the empirical model including data on potential losses affected by bridge tap placement and bridge tap length in the cable plant” as called for in claim 14. In addition, none of the references, either alone or in combination, teach or suggest a tool with “means, communicatively coupled to the means for calculating, for combining the component loss values for the cable spans and the bridge taps to generate an estimated cable loss and determine if the identified service can be provided” as called for in claim 14. Accordingly, withdrawal of the rejection of claim 14 is respectfully requested.

Claims 15, 16, 18, 19, and 22

With respect to claim 15, none of the references, either alone or in combination, teach or suggest a method for “determining whether an estimated cable loss for the cable plant is capable of providing the service based on all of the entered at least one value and an empirical model of cable loss, the empirical model including data on potential losses affected by bridge tap placement and bridge tap length in the cable plant” as called for in claim 15. Accordingly, withdrawal of the rejection of claim 15 is respectfully requested.

Claims 16, 18-19, and 22 depend from claim 15 and, as such, are allowable for at least the reasons provided above with respect to claim 15. Withdrawal of the rejection of these claims is respectfully requested.

Claims 3 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over “Cable Calculator User’s Manual” in view of *Lechleider*. Claims 6, 7, 20 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *ADC* in view of *Lechleider* as applied to claim 4 above, and further in view of Official Notice. Applicants respectfully traverse this rejection.

As claims 3, 6 and 7 depend from claim 1, and claims 17, 20, and 21 depend from claim 15, these claims are allowable for at least the reasons provided above for claims 1 and 15, respectively. Withdrawal of the rejection of these claims is respectfully requested.

CONCLUSION

Applicants respectfully submit that claims 1-22 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: October 20, 2007

/David N. Fogg/
David N. Fogg
Reg. No. 35,138

Attorneys for Applicant
Fogg & Powers LLC
P.O. Box 581339
Minneapolis, MN 55458-1339
T – (612) 332-4720
F – (612) 332-4731